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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,362	04/16/2004	Kyung Su Chae	8733.1024.00-US	8091
7590 08/03/2009 MCKENNA LONG & ALDRIDGE LLP Song K. Jung 1900 K Street, N.W. Washington, DC 20006			EXAMINER LIN, JAMES	
			ART UNIT 1792	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/825,362

Applicant(s)

CHAE ET AL.

Examiner

Jimmy Lin

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 24-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/22/2009 has been entered.

Claim Interpretation

2. Claim 16 recites "wherein the plurality of second dispensers are filled with sealant instead of silver...paste if silver dot is not required according to a model of a liquid crystal display panel" and does not actually require the deposition of silver paste. Therefore, the claim will be interpreted as at least being inclusive of having both the first and second plurality of dispensers filled with sealant.

Claim Objections

3. Claim 16 is objected to because of the following informalities:

The recitation of "pasteif" in line 18 should be deleted. It seems as though Applicant had intended to strike through "pasteif" rather than underlining it since the recitation was present in the previous claims submitted 10/7/2008.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 16 and 21-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitation of "providing a plurality of silver-sealant complex dispensers...with one apparatus above the tables" (claim 16, lines 5-6) fails to comply with the written description requirement. The specification only provides support for providing a plurality of tables each having a plurality of syringe dispensers (Figs. 5A, 5B, 6 and 7), as opposed to having a single apparatus of dispensers provided over a plurality of tables.

The recitation of "the first and second dispensers are respectively formed at both sides of the tables" fails to comply with the written description requirement. The recitation seems to require that the first dispensers are formed on both sides of the tables and that the second dispensers are formed on both sides of the tables. However, the specification only seems to teach that the first dispensers are formed on one side of a table and that the second dispensers are formed on the other side of the table opposite the side of the first dispensers (see [0062] and [0076] of the published application U.S. Publication No. 2005/0112283). For the purpose of this examination, the recitation will be interpreted to be inclusive of at least both interpretations.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 16 and 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "wherein the substrates are selected in a cell process" is indefinite. The present specification neither provides a special definition for "cell process" nor uses the term in context such that one would understand the meaning of the term. Thus, the prior art is being used to define the term as the formation of an LCD panel having a lower substrate and an upper substrate (see [0028] of Lee (U.S. Patent No. 2002/0071065)). Using this definition, it is unclear as to how the substrate can be selected in a cell process. For the purpose of this examination, the recitation is being interpreted to be at least inclusive of a substrate made using the cell process.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (U.S. Publication No. 2002/0024628) in view of Komine et al. (U.S. Patent No. 5,292,368). Lee '065 is being used as a teaching reference for the definition of "cell process".

Walker discloses a method of making an LCD panel (abstract). A sealing material 150 can be dispensed onto a substrate using a syringe having a fluid dispensing system [0069]. The LCD panel is formed having a lower substrate and an upper substrate (i.e., having a cell process) (Fig. 10) (see definition of "cell process" as defined in [0028] of Lee). The syringe is used to supply sealing material (i.e., dispensing material) to the substrate having a plurality of micro display areas 155 (i.e., a plurality of unit panels) (Fig. 7) through nozzles at the end of the syringe.

Walker does not explicitly teach providing a plurality of syringes. However, it is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced (see MPEP 2144.04.VI.B.). Walker teaches that multiple sealing material patterns 150 are formed on the substrate (Fig. 7). The use of multiple dispensing syringes of Walker would have decreased the amount of time required for depositing the multiple sealing patterns. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used a plurality of syringes of Walker in the method of forming LCD panel of Walker with a reasonable expectation of success. One would have been motivated to do so in order to have reduced process time and costs.

Walker does not explicitly teach providing a plurality of tables. However, one of ordinary skill in the art would have expected the use of a single table or a plurality of tables in the formation of the sealing material of Walker to have been similar. It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is

produced (see MPEP 2144.04.V1.B.). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used a plurality of tables each having a plurality of syringes with a reasonable expectation of success. One would have been motivated to do so in order to have formed sealing patterns on multiple substrates at the same time.

As to the requirement of the tables operating independently along a transferring path of the substrates, a stationary table is being interpreted to be operating independently along a transferring path of the substrate because a table that does not move is independent of the transfer path of the substrate.

Walker does not explicitly teach that the first and second dispensers are respectively formed at both sides of the tables. However, Komine teaches a method of applying a coating onto a display device. The coating is applied using a plurality of dispensers arranged on opposing sides of the table (abstract; Figs. 1-2). Because Komine teaches that such orientation of dispensers was operable in the dispensing art, it would have been obvious to one of ordinary skill in the art at the time of invention to have placed the plurality of syringes of Walker on opposite sides of the table with a reasonable expectation of success. The selection of something based on its known suitability for its intended use has been held to support a prima facie case of obviousness (MPEP 2144.07).

Claim 21: Walker teaches that the unit panels include a plurality of picture display regions [0006].

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker '628 as applied to claim 16 above, and further in view of Yamamoto et al. (JP 61-055625, listed in the IDS filed 7/23/2007).

Walker does not explicitly teach that the unit panels include at least two different sizes. However, Yamamoto teaches that it was well known in the LCD art to have formed a plurality of unit panels of different sizes on a single substrate (Figs. 1-2). Because Yamamoto teaches that the use of such substrates was operable in the art, it would have been obvious to one of ordinary skill in the art at the time of invention to have formed a plurality of unit panels of different sizes on the substrate of Walker with a reasonable expectation of success. The selection of something

based on its known suitability for its intended use has been held to support a prima facie case of obviousness (MPEP 2144.07).

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker '628 as applied to claim 21 above, and further in view of Hashimoto et al. (U.S. Publication No. 2001/0013920).

Walker does not explicitly teach that the picture display regions have at least two different driving modes. However, Hashimoto teaches that the liquid crystal composition can be used in any mode [0068]. One of ordinary skill in the art would have used the mode of the liquid crystal necessary for the LCD substrates. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used provided two different driving modes to the picture display regions of Yamamoto with a reasonable expectation of success in order to have manufactured an LCD panel having the desired effects.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 16 and 21-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11 and 13 of copending Application No. 10/691662. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of '662 fully encompasses the present claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claim 23 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-11 and 13-15 of copending Application No. 10/691662 in view of Hashimoto '920.

'662 does not require the picture display regions having at least two different driving modes. However, Hashimoto teaches that the liquid crystal composition can be used in any mode [0068]. One of ordinary skill in the art would have used whichever mode of the liquid crystal necessary for the LCD substrates. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used provided two different driving modes to the picture display regions with a reasonable expectation of success in order to have formed an LCD panel having the desired effects.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

15. Applicant's arguments filed 4/24/2009 have been fully considered but they are not persuasive.

Applicant argues on pg. 6 that the recitation of "pasteif" in claim 16 has been amended to "paste if". Although the claim has been amended to recite "paste if", the recitation of "pasteif" has not been deleted. Claim 16 is still being objected to for this reason.

Applicant argue on pg. 7 that the dispensing unit includes the first dispenser for forming a seal pattern and the second dispenser for forming a silver dot but the syringe may be filled with sealant instead of silver paste to form a seal pattern if silver dot is not required according to a model of a liquid crystal display panel. However, the recitation of "wherein the plurality of

second dispensers are filled with sealant instead of silver...paste if silver dot is not required according to a model of a liquid crystal display panel" encompasses an embodiment where the deposition of silver paste is not required. Therefore, the claim will be interpreted as at least being inclusive of having both the first and second plurality of dispensers filled with sealant.

Applicant argues on pg. 8 that none of the cited references teach or suggest the features of the invention of claim 16. However, Walker and Komine teach all the limitations of the claim. See above rejection for details.

As to Applicant arguments on pg. 8 directed to dependent claims 21-23 as being patentable due to their dependency to claim 16, Applicants have not separately argued the patentability of the dependent claims. Accordingly, claims 21-23 are also being rejected. See above rejections for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Lin whose telephone number is (571)272-8902. The examiner can normally be reached on Monday thru Friday 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frederick J. Parker/
Primary Examiner, Art Unit 1792

/Jimmy Lin/
Examiner, Art Unit 1792

